Lewis and Clark: Linguistic Pioneers.—Each year produces its own dreary procession of doctoral theses executed in the standard Teutonic tradition, and usually characterized by a titanic dullness. The subject1 of the present review, although apparently a doctoral thesis of the conventional sort, is far from dull; much of its content consists of a fiction that is stranger than truth. This thesis deals with certain aspects of one of the more romantic and remarkable of the achievements of modern man in the New World—the great westward trek of the Lewis & Clark Expedition to the farthest parts of the North American continent during the years 1804-1806. The basic account of this exploration was written by the leader of the expedition, Captain Meriwether Lewis, during the course of the trip, and his intention was to have completed and corrected the journals on his return to the United States in 1806. But Captain Lewis died before he had opportunity to prepare the journals for publication, a fact to which doubtless may be ascribed many verbal inaccuracies that appeared in the original published edition of the Journal. These verbal inaccuracies have been carefully scrutinized by Dr. Criswell. The plan and purpose of this rather pretentious study, we are told, is to examine a list of some 1859 words selected from the Journals and arranged alphabetically, with a view to recording the peculiarities of the "American language" as it was written by the great explorers. Since neither Lewis nor Clark was particularly literate or equipped with much formal education, an extraordinary collection of colloquialisms, provincialisms, homely expressions, and plain misspellings, is the inevitable harvest. Typical are "dost of salts"; having "blankets fleed"; "ganaraehah" and other "venerious" troubles; "ball-pated prairie"; "leagins and mockersons" [leggins and moccasins]; -these and hundreds of others as good or better will serve to indicate how rich is the tilth and how bountiful the reward to the dutiful lexicographer. Had Associate Professor Criswell contented himself with the purely linguistic peculiarities of the Journals perhaps he would have done better, but instead he boldly ventures into the field of biology, obviously without adequate qualification. True, he arms himself with "acknowledgments" to several practitioners of botany and zoology, but these are poor talismans to ward off the evil spirits which persistently dog his intrepid footsteps through that part of the realm of natural science so vigorously portrayed in the Lewis & Clark Journals. When the author ventures into the botanical field, although following the blazes of Elliott Coues, Charles Vancouver Piper, and some other eminent students of flora and fauna, he loses the trees in the forest and gilds the lilies in the field. Many of his results and conclusions are nothing less than ludicrous, as, for example, placing mistletoe in the Aristolochiaceae, the custard apple in Menispermaceae, peppermint in the Cruciferae, stinking clover (Cleome) in the Sarraceniaceae, the genus Brodiaea in the Leguminosae, persimmon in the Sapotaceae. prickly pear and Osmaronia (which is called "fringe tree") in the Loasaceae, elderberry in the Valerianaceae, cucumber in the Campanulaceae, and the devil's-club (Oplopanax horridum) in the Compositae.

¹ Elijah Harry Criswell. Lewis & Clark: Linguistic Pioneers. University of Missouri Studies 15: i-cexii, 1-102. 1940.

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We are told that the plant with the rather fetching name of arsesmart is in the Liliaceae, but a few pages later it pops up in the genus *Polygonum*. Is this mutation, or merely experimental taxonomy? Most of the text consists of a commentary on and an interpretation of the Journals, but occasionally we are treated to a manifestation of sheer botanical inspiration, such as: "The May-apple is certainly so named because of the time at which its fruit matures . . ."! The author cannot be rightly said to be quite ruthless with personal names, in spite of Humboldt, Bonpland, and Ruth for our old friends HBK., or for referring to Mrs. Agnes Chase, the distinguished Washington agrostologist, as Mrss Chase.

Obviously, our author is not a botanist; indeed, he lays no claim to being one; he is a student of words. Let us see what he does with some of the words. About half way through the book (p. clxiii) the following explanation is offered: "We now come to what is perhaps the most important lexicographical contribution of the present study—our list of over seven hundred terms . . . hitherto unrecorded in any dictionary. The Lewis & Clark Journals offer a rich treasure of new material which should be added to our dictionaries, but which has hitherto escaped all the lexicographers . . . Nearly six hundred of them have a claim to be considered as Americanisms." A few of these "Unrecorded Americanisms (Zoological and Botanical)" selected at random from Criswell's lists are: corvus, fucus, larus, Sagittaria sagittifolia, Canadian balsam, large fern, small fern, yellow lily, pennyroyal, long-leaved pine, narrow-leaved willow, alder, angelica, arrowhead, ash, bluebell, cedar, cherry, cinquefoil, coltsfoot, columbine, elder, fern, flax, garlic, gooseberry, grape, hazelnut, juniper, kale, lobelia, mulberry, nettle, onion, plantain, poplar, rape, raven, rose, rue, rye, service-berry, sorrel, spearmint, tansy, thistle, violet. All this, of course, is plain nonsense; these words obviously are not "Americanisms", either unrecorded or recorded; most of them are English names of plants that grow in England; several are biological names of genera of plants or animals. That the author has had at least a dim suspicion of this is indicated in the following rather lame explanation (p. clxix): "However, we do find several Latin borrowings in this list: aborigines, corvus, larus, fucus, and Sagittaria sagittifolia. The last four represent half-hearted attempts of the explorers to apply scientific terminology to some of the plants and animals, with the result that, unacquainted with scientific usage, they simply use the scientific term as a common name for the thing either singly or in combination with a qualifying adjective." What does he mean, "half-hearted"? Criswell argues (p. clxxiii) that when a name is "applied to a new genus there is an unquestionable extension in meaning, which, since to an American animal, is American by origin." Can it be possible that he believes that crows (Corvus), or gulls (Larus), were "new genera" discovered by Lewis & Clark? The argument that the word e. g., elder, when used by Lewis & Clark for plants of a western North American species not hitherto seen by human beings other than Indians, constitutes an "unquestionable extension in meaning", seems to be rather pointless in view of the fact that elder is a generic, not a specific term; it includes any or all individual plants of all existing species of

the genus Sambucus, all fossil species, as well as any species of elder

yet to be evolved.

Many of the interpretations of botanical data listed under the heading of "Extensions of Meanings of New Genera" (p. clxxv) are entirely misleading, as, for instance, when Lewis is said to have used the word beech in a new sense for the common lowland alder (Alnus rubra) of the Pacific slope. Actually, this is what Lewis wrote: "The stem of the black alder arrives to a great size. It is simple, branching, and diffuse; the bark is smooth, of a light colour, with white spreading spots, resembling those of the beech." (italics mine). Clearly, Lewis was not using the term in a new generic sense; he was merely comparing the tree he was describing (alder) with another kind of tree (beech) with which he was familiar in eastern North America. The curious reader may supply himself with a considerable number of other instances of this sort. The author also gives tables of words supposed to have been used by Lewis & Clark long before they were used by anyone else, including such names as white oak, ironwood, white walnut, red cedar, arrowood, slippery elm, tamarack, etc. Actually, these names appeared in botanical works many years earlier. For example, some of them appear in the English edition of Peter Kalm's (1749-50) Travels into North America by J. R. Forster in 1770, while others were used by Michaux, Bigelow, Aiton, and other botanists some years before the publication of the Lewis & Clark Journal.

There is no need of citing additional examples from this plethora of scientific inaccuracies. It is obvious that the author has gone somewhat beyond his depth. It is a pity that the science of systematic botany has to bear the burden of such unripe scholarship. In conclusion, it can be pointed out that, although Lewis & Clark: Linguistic Pioneers may contain some material of value to lexicographers, it scarcely can be regarded as an authoritative source of botanical information, or even as a reliable commentary on the linguistic peculiarities of the Lewis & Clark Journals.—George Neville Jones, University

of Illinois.

Napaea dioica in New England.—On August 24, 1940, while collecting along the "River Road", Lewiston, Vermont (Norwich railroad station), I found a clump of tall malvaceous plants growing beside an old cellar-hole three-fifths of a mile north of the Hanover bridge. A specimen was collected in the belief that it was an escape from cultivation, and by comparison with specimens in the Jesup Herbarium at Dartmouth College was identified as Napaea dioica L. The identification has been checked by Mr. C. A. Weatherby of the Gray Herbarium, from material subsequently sent to him. Further investigation at the original site disclosed two more clumps, in rather dry, sandy soil, one less than ten feet from the B. & M. railroad tracks, which lie in a cut just behind the cellar-hole. One clump con-